**Planning Technical Foundation**

**of E-Commerce business**

**Submission Title: “Marketplace Technical Foundation [Alishba Ecommerce ]”**

**#Step 1:**

Define Technical Requirements

**=>** Frontend website:

user friendly interface and make sure it is responsive on mobile and other desktop .

=>Sanity CMS as backend:

Use sanity CMS to manage productdata, customerdetail, orderdetail & record.

Designing schemas in sanity

=>Third party APIs:

Use APIs for shipment tracking, payment method.

2. Design System Architecture

[Frontend (Next.js)

[Sanity CMS] ---------> [Product Data API]

[Third-Party API] -- ---------> [Shipment Tracking API]

[Payment Gateway]

Key Workflows to Include:

**1.User Registration:**

The user login the website and go the landing page of the website.

**2.Product Browsing:**

User browse through various product as they click on any product to visit its detail page,

which is powered by sanity as the backend CMS for updating product details.

**3.Adding to cart:**

user add the desired products in the cart.

**4. Payment method:**

User proceed to the payment page where they can choose payment method including

cash on delivery, credit cards and online platforms.

**5. Shipment:**

After the payment, the shipping process is handled by ShipEngine, which track the

delivery from the warehouse to the customer’s address.

homepage

Browses Products

Product detail

Add to cart

Payment method

checkout

Shipment process

3. Plan API Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| End Point | Method | Description | Parameter | Response |
| / api/product | GET | Fetch all product | - |  |
| / api/product/id | GET | Fetch single Product | Path id | {id,name} |
| / api/Cart | POST | Add new item | Name,price,  category | {success,true,id:7} |
| / api/Product/id | PUT | Update an item | Id,name, price | {success,true,id:7} |

1. Sanity Schema for website

export default {

name: 'product',

title: 'Product',

type: 'document',

fields: [

{

name: 'name',

title: 'Name',

type: 'string',

},

{

name: 'description',

title: 'Description',

type: 'text',

},

{

name: 'category',

title: 'Category',

type: 'reference',

},

{

name: 'price',

title: 'Price',

type: 'number', },

{

name: 'stock',

title: 'Stock',

type: 'number',

},

{

name: 'image',

title: 'Image',

type: 'image',

},

],

};

export default {

name: 'category',

title: 'Category',

type: 'document',

fields: [

{

name: 'name',

title: 'Name',

type: 'string',

},

## Category Schema

{

name: 'description',

title: 'Description',

type: 'text',

},

],

};

## User Schema

export default {

name: 'user',

title: 'User',

type: 'document',

fields: [

{

name: 'username',

title: 'Username',

type: 'string',

},

{

name: 'email',

title: 'Email',

type: 'string',

},

{

name: 'password',

title: 'Password',

type: 'string',

},

],

};

## Order Schema

export default {

name: 'order',

title: 'Order',

type: 'document',

fields: [

{

name: 'user',

title: 'User',

type: 'reference',

},

{

name: 'totalAmount',

title: 'Total Amount',

type: 'number',

},

{

name: 'paymentMethod',

title: 'Payment Method',

type: 'string',

options: {

list: [

{ title: 'Credit Card', value: 'credit\_card' },

{ title: 'PayPal', value: 'paypal' },

{ title: 'Cash on Delivery', value: 'cash\_on\_delivery' },

],

},

},

{

name: 'shippingAddress',

title: 'Shipping Address',

type: 'text',

},

{

name: 'orderStatus',

title: 'Order Status',

type: 'string',

options: {

list: [

{ title: 'Pending', value: 'pending' },

{ title: 'Shipped', value: 'shipped' },

{ title: 'Delivered', value: 'delivered' },

{ title: 'Cancelled', value: 'cancelled' },

],

},

},

],

};

## 

## 

## 

## 

## Order Item Schema

export default {

name: 'orderItem',

title: 'Order Item',

type: 'document',

fields: [

{

name: 'product',

title: 'Product',

type: 'reference',

},

{

name: 'quantity',

title: 'Quantity',

type: 'number',

},

{

name: 'price',

title: 'Price',

type: 'number',

},

{

name: 'total',

title: 'Total',

type: 'number',

},

],

};